



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,883	10/19/2001	John Haughey	13791	7341
293	7590	02/24/2006	EXAMINER	
Ralph A. Dowell of DOWELL & DOWELL P.C. 2111 Eisenhower Ave Suite 406 Alexandria, VA 22314			BULLOCK JR, LEWIS ALEXANDER	
			ART UNIT	PAPER NUMBER
			2195	

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/981,883	HAUGHEY, JOHN
	Examiner Lewis A. Bullock, Jr.	Art Unit 2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 6,8,11,13-22 and 32-41 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 6,8,11,13-22 and 32-41 is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 6, 11 and 13-21 rejected under 35 U.S.C. 102(b) as being anticipated by BENKESER (U.S. Patent 5,361,362).

As to claim 6, BENKESER teaches a method of executing a set of at least one incomplete task (process queue), comprising: selecting an incomplete task (process on the process queue) from the set of the basis of an expected duration for that task (via the processes are arranged based on (anticipated) holding time values wherein task are selected from either end) (col. 4, line 31 – col. 5, line 13); resetting an execution timer having an expiry condition (col. 5, lines 36-48); advancing execution of the selected task until the earlier of (i) completion of the selected task or (ii) expiry of the execution timer (via time slicing, wherein a process is returned to the queue or selected from the queue for execution based on its priority which takes into consideration the anticipated holding time) (col. 5, line 61 – col. 6, line 44; col. 4, line 31 – col. 5, line 13); and upon expiry of the execution timer prior to completion of the selected task, suspending execution of the selected task (via an interrupt signal) (col. 5, line 61 – col. 6, line 44).

As to claims 11, 13-21, BENKESER teaches advancing execution of the task (process) includes beginning the selected task whether it is new or previously suspended (via time slicing, wherein a process is returned to the queue or selected from the queue for execution based on its priority which takes into consideration the anticipated holding time) (col. 5, line 61 – col. 6, line 44; col. 4, line 31 – col. 5, line 13) saving the context of a suspended task (putting the process back on the queue), resuming the context of a selected task (executing another process from the queue) (via time slicing processes), and the expiry condition being a number of clock cycles (1 time slice) or predetermined period of time (time slice) which indicates completeness of the task (time slice) (col. 5, line 61 – col. 6, line 44). It is inherent to the teachings of BENKESER that since processes have execution characteristics (col. 2, lines 1-46), that these characteristics are the context, state or variable of the task.

3. Claim 8 and 32-41 are rejected under 35 U.S.C. 102(b) as being anticipated by HEJNA (U.S. Patent 5,287,508).

As to claim 8, HEJNA teaches a method of executing a set of at least one incomplete task, comprising: selecting an incomplete task from the set on the basis of a number of times that the task has been previously suspended (via scheduling the execution of processes using information that details the number of times the processor was allocated to a process) (col. 4, lines 52-62); resetting an execution timer having an expiry condition; advancing execution of the selected task until the earlier of (i) completion of the selected task or (ii) expiry of the execution timer; and upon expiry of

the execution timer prior to completion of the selected task, suspending execution of the suspended task (via a processor executing in the context of a schedulable unit for a time slice before switching to execute in the context of another schedulable unit) (col. 8, lines 53-60; col. 3, lines 31-55; col. 1, lines 11-19).

As to claims 32-41, HEJNA teaches advancing execution of the task includes beginning the selected task whether it is new or previously suspended, saving the context of a suspended task, resuming the context of a selected task (switching contexts), and the expiry condition being a number of clock cycles (1 time slice) or predetermined period of time (time slice) which indicates completeness of the task (time slice) (col. 8, lines 53-60; col. 1, lines 11-19). HEJNA also teaches that a context contains data regarding the process as well as the processor (cache contents) (col. 1, line 53 – col. 2, line 7).

4. Claim 22 is rejected under 35 U.S.C. 102(e) as being anticipated by CHITTOR (U.S. Patent 6,145,062).

As to claim 22, CHITTOR teaches a method of executing a set of incomplete tasks, comprising: removing an existing incomplete task from the set when a newer version of the existing incomplete task is added to the set (via flushing the conflicted write transaction and all previously scheduled transactions); executing the remainder of the set of incomplete tasks (via executing all transactions in the write queue) (col. 2, lines 40-55).

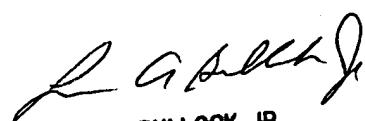
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis A. Bullock, Jr. whose telephone number is (571) 272-3759. The examiner can normally be reached on Monday-Friday, 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 21, 2006



LEWIS A. BULLOCK, JR.
PRIMARY EXAMINER